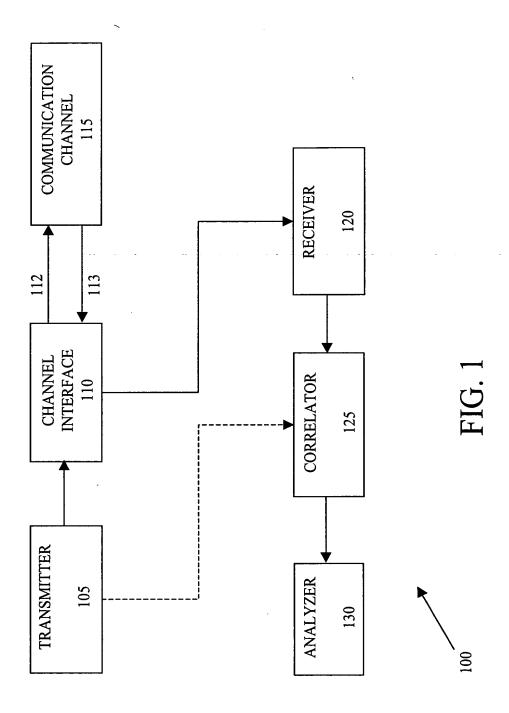
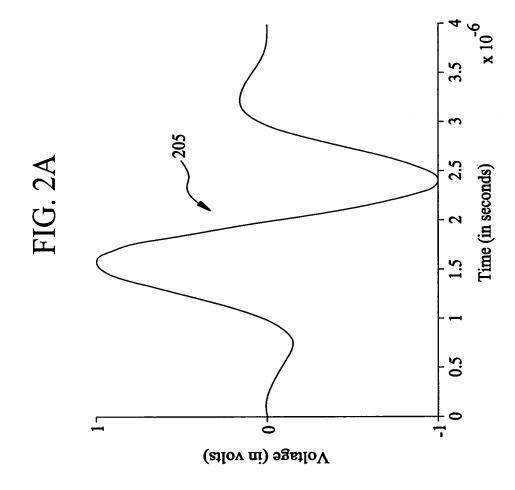


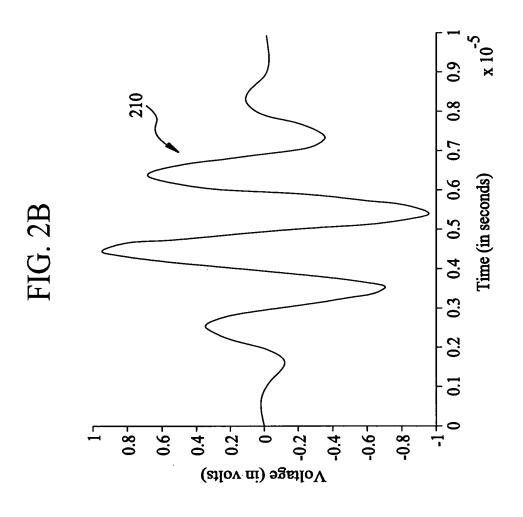
Filed: 09/15/2003 Atty. Dkt. No.: 215191.06400



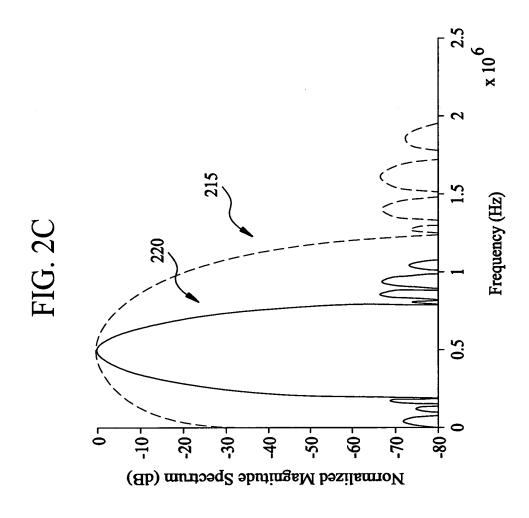
Filed: 09/15/2003 Atty. Dkt. No.: 215191.06400



Atty. Dkt. No.: 215191.06400

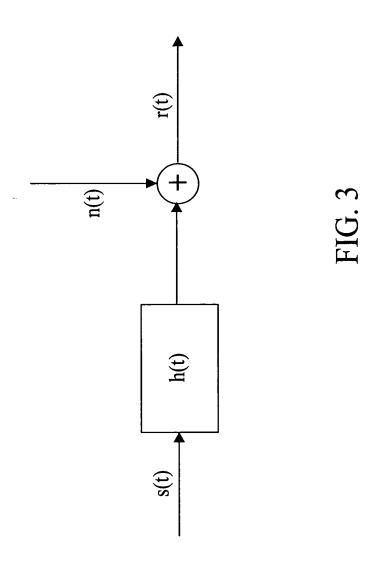


Atty. Dkt. No.: 215191.06400

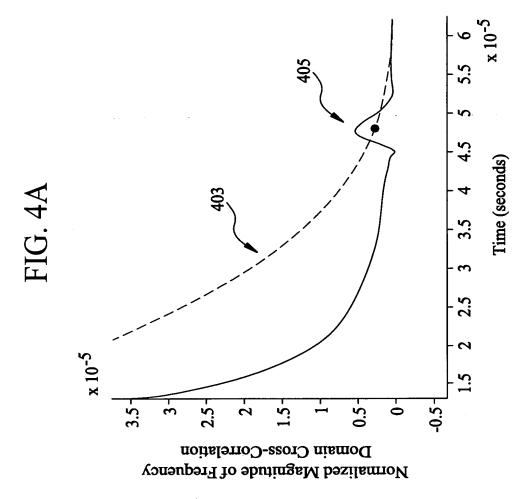


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Atty. Dkt. No.: 215191.06400



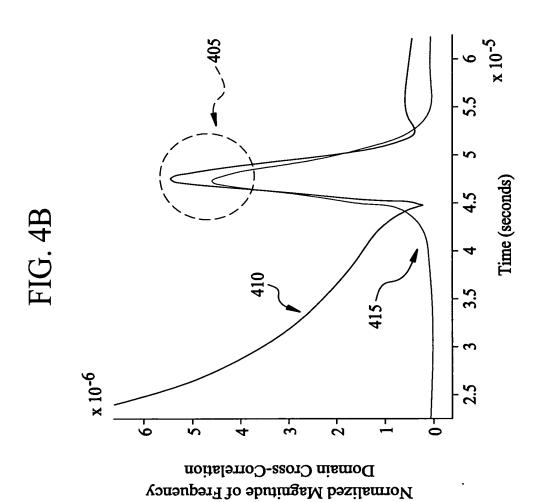
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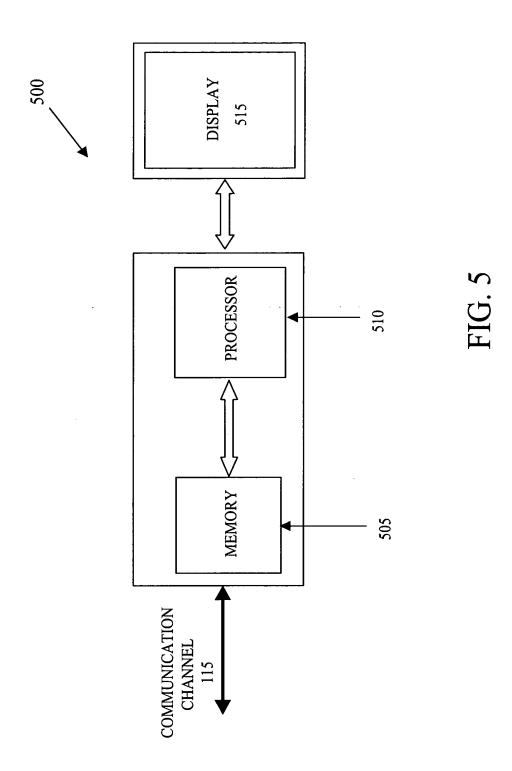
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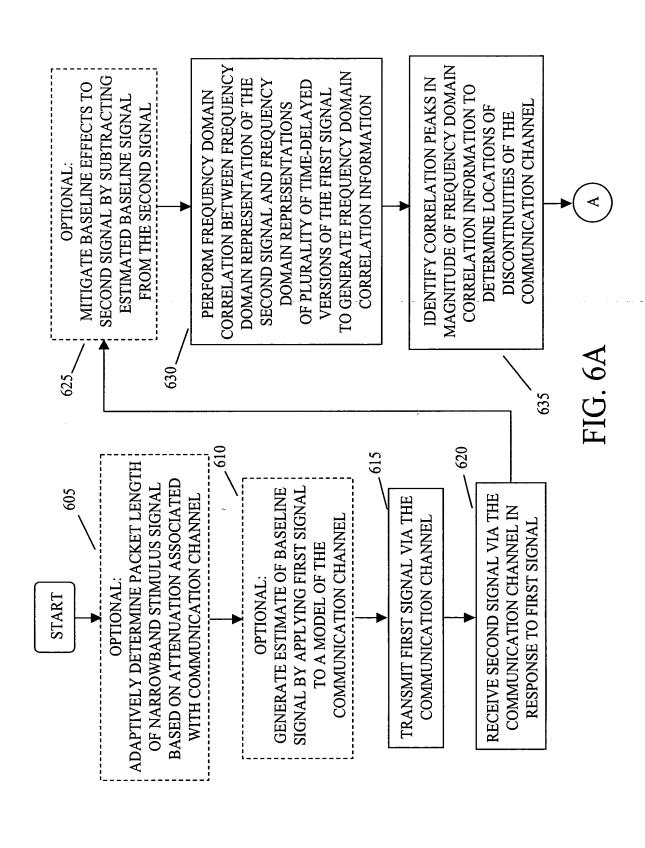
Atty. Dkt. No.: 215191.06400



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A 640

DETERMINE TYPE OF LOCATED DISCONTINUITY
FROM AMONG A PLURALITY OF TYPES OF
DISCONTINUITIES BY COMPARING AMPLITUDE
OF IDENTIFIED CORRELATION PEAK WITH
EACH OF A PLURALITY OF PREDETERMINED
THRESHOLD FUNCTIONS

645_

EXAMINE PHASE INFORMATION ASSOCIATED
WITH FREQUENCY DOMAIN CORRELATION
INFORMATION OF THE SECOND SIGNAL RELATIVE
TO AN ASSOCIATED TIME-DELAYED VERSION
OF THE FIRST SIGNAL TO DETERMINED TYPE OF
DISCONTINUITY OF THE COMMUNICATION CHANNEL

– 650

CALCULATE REFLECTION COEFFICIENTS FOR EACH IDENTIFIED CORRELATION PEAK USING AT LEAST THE DETERMINED LOCATIONS OF THE DISCONTINUITIES OF THE COMMUNICATION CHANNEL

655,

DETERMINE TOPOLOGY OF THE COMMUNICATION CHANNEL USING THE REFLECTION COEFFICIENTS

_660

DETERMINE ROUND TRIP LOSS OF THE COMMUNICATION CHANNEL TO THE DETERMINED LOCATION OF THE DISCONTINUITY USING AN AMPLITUDE OF THE IDENTIFIED CORRELATION PEAK AND AN AMPLITUDE OF A REFERENCE CORRELATION PEAK

DETERMINE PATH LOSS OF COMMUNICATION CHANNEL TO THE DETERMINED LOCATION OF THE DISCONTINUITY USING THE DETERMINED ROUND TRIP LOSS AND AT LEAST ONE CHARACTERISTIC OF A TYPE OF THE DISCONTINUITY

665 END

FIG. 6B

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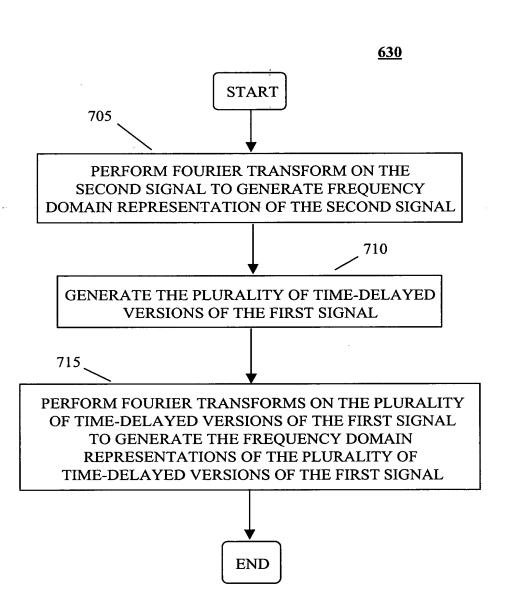


FIG. 7

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<u>635</u>

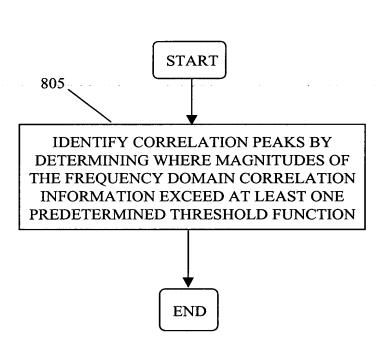
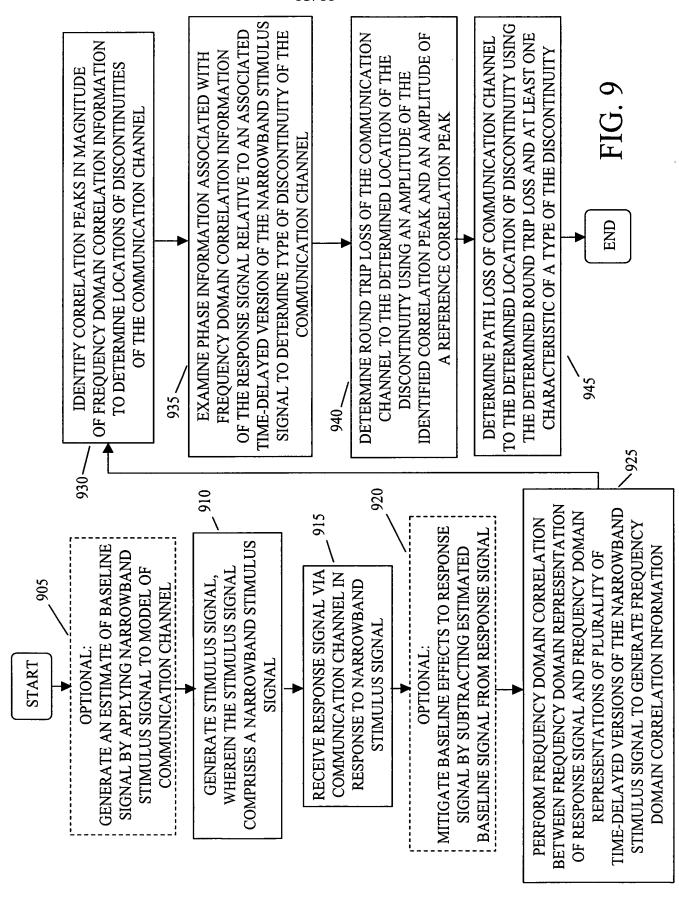


FIG. 8

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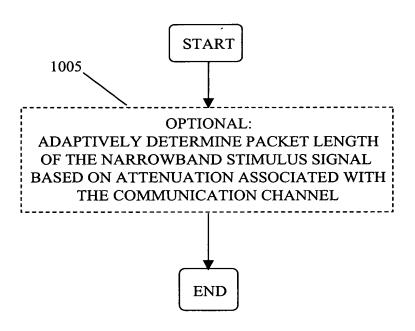


FIG. 10

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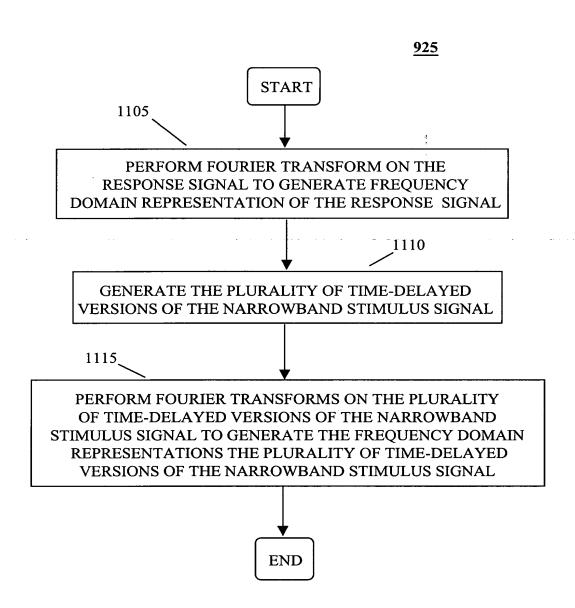


FIG. 11